October 2003



North Lake Mechant Landbridge Restoration (TE-44)

Project Status

Approved Date: 2001 **Project Area:** 6,860 acres **Approved Funds:** \$2.9 M **Total Est. Cost:** \$26 M

Net Benefit After 20 Years: 604 acres Status: Engineering and Design

Project Type: Dredged Material/Marsh Creation and

Vegetative Planting

Location

The project is located in the Terrebonne Basin, in Terrebonne Parish, Louisiana.

Problems

The project would protect and restore a critical landbridge barrier between the easily erodible fresh marshes north of Bayou De Cade and the higher saline environment of Lake Mechant. At the present shoreline erosion rate, the north Lake Mechant shore will soon fail to act as a barrier, allowing the hydrologic connection between Lake Mechant and the fresher marshes to the north.

In addition, erosion and deterioration along the banks of Raccourci Bayou are threatening to enlarge and straighten this winding tidal pass into a major conduit for water exchange. These changes will accelerate the loss of the remaining interior marshes, extend lake-like conditions, and increase salinities north to Bayou De Cade.

Should shoreline breaching and enlargement of tidal channels allow high tidal energy conditions to intrude into the project area, the organic interior marshes would likely experience increased loss rates.



Northern shoreline of Lake Mechant showing the saltmeadow cordgrass (*Spartina patens*) dominated marsh eroding behind a large stand of smooth cordgrass (*Spartina alterniflora*) left standing at the water's edge.

WWW.LaCoast.gov

Restoration Strategy

Dredged material from northern Lake Mechant will be used to create marsh. Smooth cordgrass (*Spartina alterniflora*) will also be planted along the shorelines of Lake Mechant, Goose Bay, and Lake Pagie. The project will also repair breeches formed by erosion and oilfield access canals which threaten the integrity of the landbridge.

Progress to Date

The Louisiana Department of Natural Resources will conduct project engineering and design work in-house. In February 2001, the Louisiana Department of Wildlife and Fisheries established a public oyster seedground in Lake Mechant. That seedground and several private oyster leases may impact proposed project construction activities. Work is underway to address oyster lease impact issues. The shoreline vegetation plantings were installed in summer 2003. Construction approval is expected to be sought in April 2004. This project is on Priority Project List 10.



Aerial photo of the shoreline of Lake Mechant showing the narrow lake rim and deteriorating marsh to the north. Dredged material will be pumped into this broken marsh to create new marsh to maintain this land bridge.

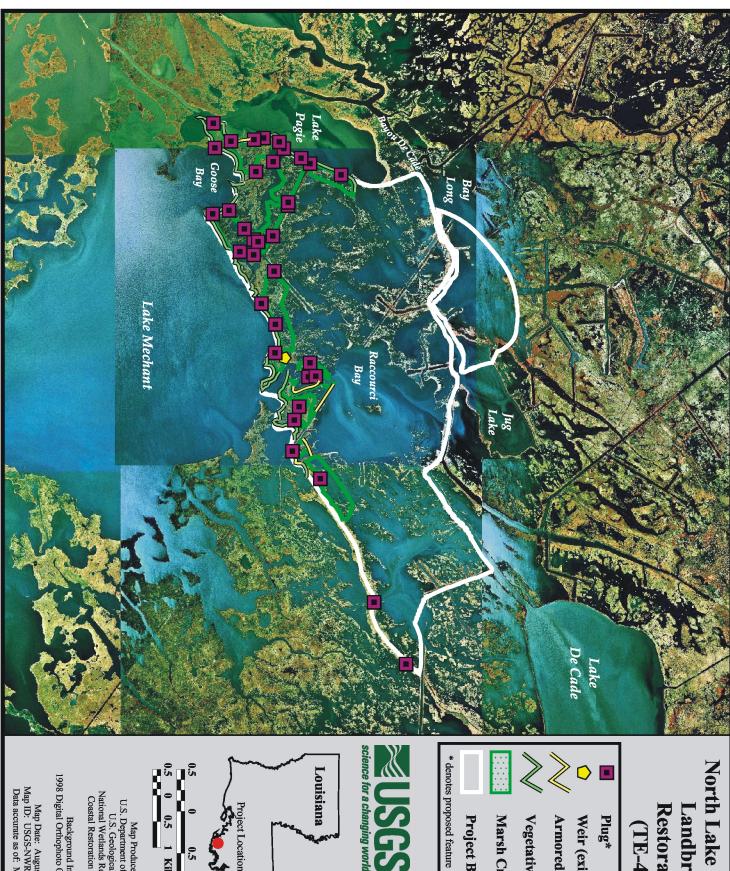
For more project information, please contact:



Federal Sponsor: U.S. Fish and Wildlife Service Lafayette, LA (337) 291-3100



Local Sponsor: Louisiana Department of Natural Resources Baton Rouge, LA (225) 342-7308



North Lake Mechant Restoration Landbridge (TE-44)

Plug*

Weir (existing repair) Armored Banks/Levees*



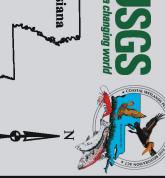
Vegetative Plantings*

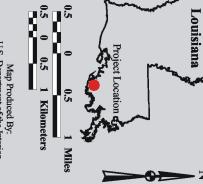


Marsh Creation Area*









Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Background Imagery: 1998 Digital Orthophoto Quarter Quadrangle

Map Date: August 12, 2003 Map ID: USGS-NWRC 2003-11-045 Data accurate as of: March 11, 2003